

Listing of Claims

The following listing of claims replaces all previous listings or versions thereof:

1. (Cancelled)
2. (Currently amended) The isolated peptide of claim 4-~~or method of claim 7~~, wherein the isolated peptide inhibits aminopeptidase A activity.
3. (Cancelled)
4. (Previously presented) An isolated peptide of 50 amino acids or less that selectively binds aminopeptidase A, wherein the isolated peptide comprises a peptide sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6.
5. – 7. (Cancelled)
8. (Currently amended) The isolated peptide of claim 4-~~or method of claim 7~~, wherein the isolated peptide is operatively coupled to a therapeutic agent.
9. (Currently amended) The isolated peptide of claim 8-~~or method of claim 8~~, wherein said therapeutic agent is a drug, a chemotherapeutic agent, a radioisotope, a pro-apoptosis agent, an anti-angiogenic agent, a hormone, a cytokine, a cytotoxic agent, a cytocidal agent, a cytostatic agent, a peptide, a protein, an antibiotic, an antibody, a Fab fragment of an antibody, a hormone antagonist, a nucleic acid or an antigen.
10. (Withdrawn; currently amended) The isolated peptide of claim 9-~~or method of claim 9~~, wherein the anti-angiogenic agent is selected from the group consisting of thrombospondin, angiostatin5, pigment epithelium-derived factor, angiotensin, laminin peptides, fibronectin peptides, plasminogen activator inhibitors, tissue metalloproteinase inhibitors, interferons, interleukin 12, platelet factor 4, IP-10, Gro- β , thrombospondin, 2-methoxyestradiol, proliferin-related protein, carboxiamidotriazole, CM101, Marimastat, pentosan polysulphate, angiopoietin 2 (Regeneron), interferon-alpha, herbimycin A, PNU145156E, 16K prolactin fragment, Linomide, thalidomide, pentoxifylline, genistein, TNP-470, endostatin, paclitaxel, Docetaxel,

polyamines, a proteasome inhibitor, a kinase inhibitor, a signaling peptide, accutin, cidofovir, vincristine, bleomycin, AGM-1470, platelet factor 4 and minocycline.

11. (Withdrawn; currently amended) The isolated peptide of claim 9 or method of claim 9, wherein said pro-apoptosis agent is selected from the group consisting of etoposide, ceramide sphingomyelin, Bax, Bid, Bik, Bad, caspase-3, caspase-8, caspase-9, fas, fas ligand, fadd, fap-1, tradd,faf, rip, reaper, apoptin, interleukin-2 converting enzyme or annexin V.

12. (Withdrawn; currently amended) The isolated peptide of claim 9 or method of claim 9, wherein said cytokine is selected from the group consisting of interleukin 1 (IL-1), IL-2, IL-5, IL-10, IL-11, IL-12, IL-18, interferon- γ (IF- γ), IF- α , IF- β , tumor necrosis factor- α (TNF- α), or GM-CSF (granulocyte macrophage colony stimulating factor).

13. (Withdrawn; currently amended) The isolated peptide of claim 4 An isolated peptide that selectively binds aminopeptidase A, wherein said peptide is attached to a molecular complex.

14. (Withdrawn) The isolated peptide of claim 13, wherein said complex is a virus, a bacteriophage, a bacterium, a liposome, a microparticle, a magnetic bead, a yeast cell, a mammalian cell or a cell.

15. (Withdrawn) The isolated peptide of claim 14, wherein said complex is a virus or a bacteriophage.

16. (Withdrawn) The isolated peptide of claim 15, wherein said virus is chosen from the group consisting of adenovirus, retrovirus and adeno-associated virus.

17. (Withdrawn) The isolated peptide of claim 15, wherein said virus is further defined as containing a gene therapy vector.

18. (Withdrawn) The isolated peptide of claim 14, wherein said peptide is attached to a eukaryotic expression vector.

19. (Withdrawn) The isolated peptide of claim 18, wherein said vector is a gene therapy vector.

20. (Cancelled)

21. (Previously presented) A pharmaceutical composition comprising a peptide in accordance with claim 4.

22. – 53. (Cancelled)

54. (Withdrawn; currently amended) A method of inhibiting viral attachment to a cell comprising contacting the cell with an effective amount ~~of a) a~~ ~~of a~~ peptide in accordance with claim 4, ~~2) an antibody that binds APA, or c) an antibody in accordance with claim 53.~~

55. (Withdrawn) The method of claim 54, wherein the cell is in a human and the peptide or antibody is administered to said human.

56. – 63. (Cancelled)

64. (Previously presented) The isolated peptide of claim 4, wherein the isolated peptide comprises SEQ ID NO:1.

65. (Previously presented) The isolated peptide of claim 4, wherein the isolated peptide comprises SEQ ID NO:2.

66. (Previously presented) The isolated peptide of claim 4, wherein the isolated peptide comprises SEQ ID NO:3.

67. (Previously presented) The isolated peptide of claim 4, wherein the isolated peptide comprises SEQ ID NO:4.

68. (Previously presented) The isolated peptide of claim 4, wherein the isolated peptide comprises SEQ ID NO:5.

69. (Previously presented) The isolated peptide of claim 4, wherein the isolated peptide comprises SEQ ID NO:6.

70. (Previously presented) The isolated peptide of claim 4, wherein the peptide is 30 amino acids or less in length.

71. (Previously presented) The isolated peptide of claim 70, wherein the peptide is 20 amino acids or less in length.

72. (Previously presented) The isolated peptide of claim 68, wherein the peptide is 20 amino acids or less in length.

73. (Previously presented) The isolated peptide of claim 72, wherein the peptide is 10 amino acids or less in length.

74. – 76. (Canceled)